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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 09/526,646      | 03/15/2000  | Ming-King "Max" Liu  | 19917-000200US      | 1209             |

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EXAMINER

LEE, CHI HO A

| ART UNIT | PAPER NUMBER |
|----------|--------------|
|----------|--------------|

2663

DATE MAILED: 07/30/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/526,646

Applicant(s)

LIU ET AL.

Examiner

Andrew Lee

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 15 March 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-3 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-2 are rejected under 35 U.S.C. 102(e) as being anticipated by Mueller et al U.S. Patent Number 6,052,411.

Re Claim 1, Prior art fig. 1 teaches a DSL Modem 12 (a receive section & transmit section) that receives/transmits a DSL signal over active link 16 (a DSL channel) (See col. 1, lines 40-60); further teaches when DSL modems 12, 22 determines that no data is being sent or received, a command is issued to enter an idle state (See col. 4, lines 17-23); once in a idle state, the receiver includes An Idle State Modulated Symbol Detector (a DSL traffic detector) that detects idle data over the DSL channel (See col. 6, lines 17-24); fig. 6 teaches flowchart in which the DSP processor in DSL modem controls the operation of the receiver wherein in Step 606 determines whether non-idle data is not being transmitted over the DSL channel; further teaches that since idle symbols are transmitted via a synchronization super-frame maintains synchronization between the DSL modems (See col. 6, lines 35-45), hence when the receiver exits the idle mode, no loss of synchronization, i.e., no retraining required

(the receive section omits at least some of the processing required for reception of data from the DSL channel).

Re Claim 2, refer to Claim 1, wherein the DSP (a host-signal processing) in the DSP modem is based on ADSL (See col. 7, lines 28-52).

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Mueller et al 6,052,411 in view of Greszczuk et al U.S. Patent Number 6,455,730.

Re Claim 3, refer to Claim 1, Mueller et al teaches in fig. 6, the DSP processor determining whether to remain in IDLE state (sleep state) in Step 606 or to exit IDLE state (normal state) in Step 614 (selective processing subsection). Mueller et al fails to explicitly teach the entering "warmup state" in the "selective processing section" after exiting the idle state and before entering "normal state".

However, Greszczuk et al teaches in fig. 2, after "AWAKEN" 98. the CPE transceiver transmit test data (warmup state) to verify the system condition before entering normal state (See col. 8, lines 10-23). One skilled in the art would have been motivated by Greszczuk et al to test the system condition before entering into "normal state" for reliability. Therefore, it would have been obvious to one ordinary skilled

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incorporate "testing of system condition" in Greszcsuk et al into the teaching of Mueller et al for reliability.

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

U.S. Patent Number 6201830 teaches low computation idle transmission;


U.S. Patent Number 6456650 teaches modem using harmonics reduction;

U.S. Patent Number 6523126 teaches watchdog timer upon receiving sleep status.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew Lee whose telephone number is 703-305-1500. The examiner can normally be reached on Monday to Friday from 8:30AM to 6:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chau Nguyen can be reached on 703-308-5340. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9314 for regular communications and 703-872-9314 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.



AI  
July 25, 2003